What Color is the Pod?

Name: Date: Assignment #: Block:

Green (G) is the dominant color for pods of peas plants. Yellow (g) is recessive.

1. What are the phenotypes of the following genotypes?
   1. GG Green
   2. Gg green
   3. gg yelllow
2. Fill in the Punnet squares below to show the outcomes of the crosses. Next to each genotype write the correct phenotype.

A. GG X Gg B. GG X gg

|  |  |
| --- | --- |
| Phenotype: | Phenotype: |
| Phenotype: | Phenotype: |

|  |  |
| --- | --- |
| Phenotype: | Phenotype: |
| Phenotype: | Phenotype: |

C. Gg X Gg A. Gg X gg

|  |  |
| --- | --- |
| Phenotype: | Phenotype: |
| Phenotype: | Phenotype: |

|  |  |
| --- | --- |
| Phenotype: | Phenotype: |
| Phenotype: | Phenotype: |

Punnet Square Practice: Complete each Punnet square. Then write the probability, in %, of each phenotype and genotype below. Key: T—Tall, t—Short; Y—Yellow seeds, y—Green Seeds; S—Short Hair, s—Long Hair

Genotype: TT

# 1.

|  |  |
| --- | --- |
|  |  |
|  |  |

1. TT

Genotype: tt

1. Tt
2. tt
3. Tall
4. Short
5. Genotype: Yy

Genotype: yy

|  |  |
| --- | --- |
|  |  |
|  |  |

* 1. YY
  2. Yy
  3. yy
  4. Yellow
  5. Green

1. Genotype: ss

|  |  |
| --- | --- |
|  |  |
|  |  |

* 1. SS

Genotype: ss

* 1. Ss
  2. ss
  3. Short
  4. Long

Genotype: Tt

# 2.

Genotype: Tt

|  |  |
| --- | --- |
|  |  |
|  |  |

1. TT
2. Tt
3. tt
4. Tall
5. Short
6. Genotype: yy

Genotype: yy

|  |  |
| --- | --- |
|  |  |
|  |  |

* 1. YY
  2. Yy
  3. yy
  4. Yellow
  5. Green

1. Genotype: Ss

Genotype: ss

|  |  |
| --- | --- |
|  |  |
|  |  |

* 1. SS
  2. Ss
  3. ss
  4. Short
  5. Long

1. Genotype: Tt

|  |  |
| --- | --- |
|  |  |
|  |  |

* 1. TT

Genotype: tt

* 1. Tt
  2. tt
  3. Tall
  4. Short

1. Genotype: YY

Genotype: YY

|  |  |
| --- | --- |
|  |  |
|  |  |

* 1. YY
  2. Yy
  3. yy
  4. Yellow
  5. Green

1. Genotype: SS

Genotype: Ss

|  |  |
| --- | --- |
|  |  |
|  |  |

* 1. SS
  2. Ss
  3. ss
  4. Short
  5. Long